

1. An assembly including a substrate and a conductive trace disposed on the substrate, wherein the trace includes nanotube segments that contact other nanotube segments to define a plurality of conductive pathways along the trace.
2. The assembly of claim 1 wherein the nanotube segments include single walled carbon nanotubes.
3. The assembly of claim 1 wherein the nanotube segments include multi-walled carbon nanotubes.
4. The assembly of claim 1 wherein the nanotube segments have different lengths.
5. The assembly of claim 1 wherein the nanotube segments include segments having a length shorter than the length of the article.
6. An assembly including a substrate and a conductive trace disposed on the substrate, wherein the trace includes an electrical network of nanotubes in contact with other nanotubes to define a plurality of conductive pathways along the trace.
7. The assembly of claim 6 wherein the nanotubes include single walled carbon nanotubes.
8. The assembly of claim 6 wherein the nanotubes include multi-walled carbon nanotubes.
9. The assembly of claim 6 wherein the nanotubes have different lengths.
10. The assembly of claim 6 wherein the nanotubes include nanotubes having a length shorter than the length of the trace.

11. An assembly including a substrate and a conductive trace of predefined shape, the conductive trace being over the substrate, the conductive trace including a plurality of nanotubes in electrical contact to form a plurality of conductive paths along the extent of the trace.
12. An assembly including a substrate, at least one metal electrode, and a conductive trace of predefined shape, the conductive trace being over the substrate, the conductive trace including a plurality of nanotubes in electrical contact to form a plurality of conductive paths along the extent of the trace, and the metal electrode being over at least a portion of the conductive trace, the metal electrode being formed by a metalization step.
13. A wafer substrate structure having a non-woven fabric of nanotubes covering a major surface of the wafer substrate and wherein the nanotubes of the fabric are arranged in accordance with inherent self-assembly traits of the nanotubes.
14. A wafer substrate structure having a non-woven fabric of nanotubes covering a major surface of the wafer substrate and wherein the fabric is substantially a monolayer of nanotubes.
15. A wafer substrate structure having a non-woven fabric of nanotubes covering a major surface of the wafer substrate and wherein the fabric has a controlled density of nanotubes.